

electrical state, and also the write prohibit state can be visually recognized.

Specifically, when the memory module is set in the write prohibit state, the conductive seal is attached to a predetermined position. Thereby, the write prohibit state is visually indicated and electrically detected. According to this embodiment, therefore, the write prohibit state can fully be recognized and detected with use of a small, thin memory module, as compared to a conventional large, thick memory module in which the write prohibit state is set by making use of the change in shape thereof. In other words, even if the memory module is small and thin, the write prohibit state can be visually recognized and electrically detected.

In the present method in which the write prohibit state is set by attaching the conductive seal, the memory module can easily be restored to the write permit state from the write prohibit state by removing the conductive seal. Therefore, as compared to a conventional method in which a hole is formed in the module, the memory module can be more easily restored from the write prohibit state to the write permit state and the strength of the memory module is not degraded.

In addition, according to the present method in which the data write prohibit state is discriminated on the basis of the presence/absence of the conductive seal, the write prohibit mechanism is realized at lower cost, than in the conventional method in which the write prohibit state is set by making use of the change in shape.

The above embodiment is directed to a case where the write prohibit state is set by attaching the conductive seal to the non-conductive memory module. The present invention, however, is applicable to a case where the write permit state is set by attaching a conductive seal.

In the present method, the conductive state obtained by attaching the conductive seal can be associated with either the write prohibit state or the write permit state, depending on whether the conductive state effected between the connector pins 25 by the attachment of the conductive seal is associated with the write prohibit state or with the write permit state.

Suppose that the attachment of the conductive seal is associated with the write prohibit state. In this case, if defective contact occurs between the conductive seal and the connector pins due to some cause, the write permit state is erroneously recognized and necessary data would be erased.

On the other hand, if the attachment of the conductive seal is associated with the write permit state, the seal needs to be attached prior to the write operation. The frequency of actual use of the memory module in the write permit state is much higher than that in the write prohibit state. Consequently, the seal is worn earlier and the reliability of the detection of the conductive state must be ensured to compensate the earlier wear of the seal.

In the present embodiment, in order to ensure the reliability of the detection of the conductive state, the conductive state effected by the attachment of the conductive seal is associated with the write prohibit state in which the module is used much less frequently. However, the user can properly decide, depending on the purpose of use, etc., whether the conductive state is associated with the write prohibit state or the write permit state.

If an electrically conductive memory module is used, an electrically non-conductive seal may be attached to set the write prohibit state or write permit state.

In the above embodiment, the memory module is inserted in the card-shaped holder and the card-shaped holder con-

taining the module is mounted in the electronic device. However, the memory module may be directly mounted in the mounting unit of the electronic device having the drive apparatus.

The present invention is applicable not only to the memory module but also to various storage mediums such as floppy disks or magnetic tapes.

The conductive or non-conductive seal may be replaced with a conductive or non-conductive coating material such as ink. In this case, too, the same advantage as in the above embodiment can be obtained.

Other modifications can be made without departing from the spirit of the present invention.

As has been described above in detail, according to the present invention, there is provided a small and thin information storage apparatus permitting one to visually recognize the write prohibit state thereof and making it possible to realize a write prohibit mechanism at low cost and an information processing apparatus using this information storage apparatus.

Additional advantages and modifications will readily occur to those skilled in the art. Therefore, the invention in its broader aspects is not limited to the specific details, and representative devices shown and described herein. Accordingly, various modifications may be made without departing from the spirit or scope of the general inventive concept as defined by the appended claims and their equivalents.

What is claimed is:

1. An information storage card apparatus comprising:
 - a supporting card;
 - storage medium means on said supporting card in which information can be written; and
 - a state-designating conductive member provided on a surface of the supporting card designating a state of said storage medium means in which writing information to the storage medium means is permitted or prohibited, wherein a write-permitting or a write-inhibiting signal is produced by said state-designating conductive member.
2. The apparatus of claim 1, wherein said supporting storage medium means comprises a storage medium device including at least one nonvolatile semiconductor memory device.
3. The apparatus of claim 1, wherein said supporting card has a recess in which said state-designating conductive member is provided.
4. The apparatus of claim 1, wherein said supporting card is nonconductive and said state-designating conductive member is conductive to designate that said writing information is prohibited.
5. The apparatus of claim 1, wherein said state-designating conductive member is a seal.
6. The apparatus of claim 3, wherein said state-designating conductive member is a seal.
7. The apparatus of claim 4, wherein said conductive member is a seal.
8. An information storage apparatus comprising:
 - a storage medium in which information can be written; and
 - a support member incorporating said storage medium, the support member having a first portion on a main surface thereof where an external connection terminal electrically connected to said storage medium is provided, and a second portion on said main surface.

where a state-designating member for designating a state in which writing of information to the storage medium is prohibited is provided, and wherein a write-permitting or a write-inhibiting signal is produced by said state-designating member.

10. The information storage apparatus according to claim 8, wherein said state-designating member is composed of a non-conductive material.

11. The information storage apparatus according to claim 8, wherein a height of the first portion on the main surface of said support member where said external connection terminal is provided is equal to a height of the second portion on the main surface of said support member, where said state-designating member is provided.

12. The information storage apparatus according to claim 8, wherein said first portion where said external connection terminal is provided is formed in a first recess on the main surface of said support member and said second portion where said state-designating member for designating a state in which writing of information is prohibited is provided is formed in a second recess on the main surface of said support member.

13. The information storage apparatus according to claim 12, wherein the depths of said first and second recesses are greater than the height of said external connection terminal and the height of said state-designating member.

14. The information storage apparatus according to claim 13, wherein said first recess is separated from said second recess.

15. The information storage apparatus according to claim 11, wherein said first portion where said external connection terminal is provided is formed in a first recess on the main surface of said support member and said second portion where said state-designating member for designating a state in which writing of information is prohibited is provided is formed in a second recess on the main surface of said support member.

16. The information storage apparatus according to claim 15, wherein the depths of said first and second recesses are deeper than the height of said external connection terminal and the height of said state-designating member.

17. The information storage apparatus according to claim 16, wherein said first recess is separated from said second recess.

18. An information storage apparatus comprising:
a storage medium in which information can be written;
and

a support member incorporating said storage medium, the support member having a first portion on a main surface thereof where an external connection terminal electrically connected to said storage medium is provided, and a second portion on said main surface, adapted for providing thereon a state-designating member for designating a state in which writing of information to the storage medium is prohibited wherein, a write-permitting or a write-inhibiting signal is produced by said state-designating member.

19. The information storage apparatus according to claim 18, wherein said state-designating member is composed of a conductive material.

20. The information storage apparatus according to claim 18, wherein said state-designating member is composed of a non-conductive material.

21. The information storage apparatus according to claim 18, wherein a height of the first portion on the main surface

of said support member where said external connection terminal is provided is equal to a height of the second portion on the main surface of said support member, adapted for providing thereon said state-designating member.

22. The information storage apparatus according to claim 18, wherein said first portion where said external connection terminal is provided is formed in a first recess on the main surface of said support member and said second portion adapted to be provided with said state-designating member for designating a state in which writing of information is prohibited is formed in a second recess on the main surface of said support member.

23. The information storage apparatus according to claim 22, wherein the depths of said first and second recesses are greater than the height of said external connection terminal and the height of said state-designating member.

24. The information storage apparatus according to claim 23, wherein said first recess is separated from said second recess.

25. The information storage apparatus according to claim 21, wherein said first portion where said external connection terminal is provided is formed in a first recess on the main surface of said support member and said second portion adapted for providing thereon said state-designating member for designating a state in which writing of information is prohibited is formed in a second recess on the main surface of said support member.

26. The information storage apparatus according to claim 25, wherein the depths of said first and second recesses are deeper than the height of said external connection terminal and the height of said state-designating member.

27. The information storage apparatus according to claim 26, wherein said first recess is separated from said second recess.

28. The information storage apparatus comprising:

a storage medium in which information can be written;

a supporting member incorporating said storage medium, the support member having a first portion on a main surface thereof where an external connection terminal electrically connected to said storage medium is provided, and a second portion on said main surface; and

a state-designating member on said second portion, for designating a state in which writing of information to the storage medium is prohibited, wherein a write-permitting or a write-inhibiting signal is produced by said state-designating member.

29. The information storage apparatus according to claim 3, wherein said state-designating member is composed of conductive material.

30. The information storage apparatus according to claim 28, wherein a height of the first portion on the main surface of said support member where said external connection terminal is provided is equal to a height of the second portion on the main surface of said support member, where said state-designating member is provided.

31. The information storage apparatus according to claim 28, wherein said first portion where said external connection terminal is provided is formed in a first recess on the main surface of said support member and said second portion where said state-designating member for designating a state in which writing of information is prohibited is provided is formed in a second recess on the main surface of said support member.

32. The information storage apparatus according to claim 31, wherein the depths of said first and second recesses are

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greater than the height of said external connection terminal and the height of said state-designating member.

33. The information storage apparatus according to claim 32, wherein said first recess is separated from said second recess.

34. The information storage apparatus according to claim 30, wherein said first portion where said external connection terminal is provided is formed in a first recess on the main surface of said support member and said second portion where said state-designating member for designating a state in which writing of information is prohibited is provided is

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formed in a second recess on the main surface of said support member.

35. The information storage apparatus according to claim 34, wherein the depths of said first and second recesses are greater than the height of said external connection terminal and the height of said state-designating member.

36. The information storage apparatus according to claim 35, wherein said first recess is separated from said second recess.

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